REMARKS/ARGUMENTS

In the present application, claims 1-21 are pending. Claims 1-21 are rejected. Claim 21 is amended. No new matter has been added. As a result of this response, claims 1-21 are believed to be in condition for allowance.

The Amendment

Claim 1 is amended to recite the previously claimed step of executing the invoked network discovery function for examining the network using a salutation discovery protocol. In addition, claim 21 now recites that the execution of the discovery protocols proceeds in the sequence claimed as illustrated in Fig. 3 and described in the specification.

Claim Rejections under 35 USC §102(e)

The Examiner rejected claims 1, 4-10, 13-16, and 19-20 as being anticipated by Slaughter et al. (6,970,869). With regards to claim 1, the Examiner asserted that Slaughter et al. discloses "a computer implemented method for discovering data communication network configuration information (Slaughter: col. 7, lines 42-51), comprising steps of: invoking a network discovery function (Slaughter: col. 13, lines 54-61); executing the invoked network discovery function for examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially (Slaughter: col. 34, lines 50-61); and while executing the invoked network discovery function, building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols (Slaughter: col. 31, lines 39-63; col. 73: col. [sic] 38-60."

Applicants respectfully disagree with the Examiner's characterization of the teachings of Slaughter. Specifically, applicants argue that Slaughter fails to teach or otherwise disclose examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially as well as building a list containing network configuration information discovered from said use of the individual ones of the plurality of network configuration discovery protocols.

A brief examination of the Examiner's citations provides a general overview of the teachings of Slaughter. Slaughter teaches a distributed computing environment that "relies on

spaces to provide a rendezvous mechanism that brokers services or content to clients." (col. 30, lines 2-5). Slaughter further explains that "A space itself is a service. Like any service, a space has an advertisement, which a client of the space must first obtain in order to be able to run that space service." (col. 30, lines 14-17). And, "Thus a mechanism for addressing and accessing a service in a distributed computing environment may be published as an advertisement in a space. Clients may discover a space and then lookup individual advertisement for services or content." (col. 30, lines 63-67).

Stated simply, Slaughter discloses the use of "spaces" in which there are advertisements for services available to clients. Services list their information in the spaces and clients access the spaces to retrieve the information. This naturally raises the question of how a client finds a space to begin with. Slaughter explains that a "Space discovery is **a** protocol a client or service may use to find a space." (col. 34. lines 36-37). In one embodiment, a listener agent may be configured to listen for discovery requests and to respond with address information of the requested space. In another embodiment, the discovery protocol is a service advertised in a client's default space. Once a client finds a space, it gains access to the advertisements in the space.

Turning now to the Examiner's rejection of claim 1, the Examiner cites col. 31, lines 39-63 and col. 73, lines 38-60 as teaching the recited "while executing the invoked network discovery function, building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols." In fact, at the Examiner's citation it is disclosed, in relevant part, that:

> In one embodiment, yet another possible state for advertisements is a persistent archived state. An archival procedure may turn a live published advertisement into a stream of bytes that may be persistently stored for later reconstruction. Archived advertisements may be sent (e.g. in their raw XML form) from the space to an archival service. ... Persistent advertisements may be stored (e.g. by an archival service) for future use in a persistent storage location such as a file or a database. A space through the archival procedure may enable advertisements to be stored, however the space does not necessarily play a role in how persisted advertisement entries are actually stored. How persisted advertisements are stored may be determined by the advertisement's archival service. Typically, no

> events are generated on behalf of archived advertisements. Also, changes may not be allowed for advertisements in the persistent archived state.

It is evident from this description that Slaughter et al. discloses that an archival service can persistently store advertisements stored in spaces. Note that "How persisted advertisements are stored may be determined by the advertisement's archival service ". There is no disclosure that the advertisements stored in archival fashion form information "discovered from said use of said individual ones of said plurality of network configuration discovery protocols" as recited. In fact, there is no link disclosed between the operation of the archival service and any discovery protocol invoked by a client. In addition, there is no disclosure that the archived advertisements comprise a "list" as recited. At the Examiner's citation of col. 73, lines 38-60, there is disclosed, in relevant part:

> FIG. 29 illustrates bridging a client 1250 external to the distributed computing environment to a space 1254 in the distributed computing environment. **Bridging agent 1252 may serve as the go-between between client 1250 and space 1254. Bridging agent 1252 may communicate with client 1250 in a communications protocol understandable by the client 1250. Bridging agent 1252 may map the client's communications protocol into the XML messaging protocol necessary to communicate with space 1254 perform the facilities provided by space 1254**. Bridging agent 1252, at client 1250's request, may locate and run services on space 1254. **For example, client 1250 may request a list of all services of a particular type from space 1254**. Bridging agent 1252 may locate service advertisements 1256*a-c* and return the results to client 1250. Alternatively, the results may be posted in a results space, and the location of the results may be returned to the client 1250. Client 1250 may then choose to execute service advertisement 1256*a*, and may send a message (in the client 1250's communications protocol) to bridging agent 1252. Bridging agent 1252 may then send the XML request message(s) necessary to execute the service represented by service advertisement 1256*a*, and may return the results of the service to client 1250.

To the extent that the results returned by the bridging agent to the client form a "list" as requested by the client, such a list does not contain information "discovered from said use of said individual ones of said plurality of network configuration discovery protocols" as recited. Slaughter clearly states that the client's request to the bridging agent is achieved via a

communication protocol, not a network configuration discovery protocol as recited. Similarly, the bridging agent communicates with a given space via a messaging protocol, not a network configuration discovery protocol. As a result, any "list" disclosed by Slaughter does not contain network configuration information discovered by the use of one network configuration discovery protocol, let alone individual ones of a plurality of network configuration discovery protocols as claimed.

For the above stated reasons, Applicants respectfully submit that Slaughter fails to teach or otherwise disclose "building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols" as recited. For the reason alone, claim 1 is in condition for allowance. Independent claims 10 and 16 likewise recite elements similar to those recited in claim 1 and discussed above. For the reasons stated above with regards to claim 1, claims 10 and 16 are likewise in condition for allowance. As all of claims 4-9, 13-15, and 19-20 depend upon claims 1, 10, and 16, they are likewise in condition for allowance.

Claim Rejections under 35 USC §103(a)

The Examiner rejected claims 2-3, 11-12, and 17-18 as being unpatentable over Slaughter in view of Funk et al. (5,937,162). The Examiner asserted that, while Slaughter does not explicitly teach using specific DNS protocols, Funk et al. do so teach and that the combination of the teachings of Funk et al. and Slaughter would serve to teach the use of specific DNS protocols. Applicant notes that Funk et al., like Slaughter, do not teach, "building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols" as claimed. As a result, the combination of the teachings of Funk et al. and Slaughter, such a combination neither suggested nor deemed appropriate, similarly fails to teach this element of claim 1, upon which claims 2-3 depend. As a result, claims 2-3 are in condition for allowance. For the reasons similar to those discussed above, claim 11-12 and 17-18 are likewise in condition for allowance.

The Examiner rejected claim 21 as being unpatentable over Slaughter in view of Matsuda (2002/0133573). The Examiner asserted that, while Slaughter does not explicitly teach using

specific DNS protocols, Matsuda does so teach and that the combination of the teachings of Matsuda and Slaughter would serve to teach the use of specific DNS protocols.

As noted above, claim 21 has been amended to recite the execution of a salutation discovery protocol. Support for this amendment can be found, at least, at page 3, lines 11-21 of the specification. Applicant notes that there is described sufficient detail to enable one skilled in the art to practice the invention. For example, "Mapping Salutation Architecture APIs to Bluetooth Service Discovery Layer version 1.0", dated July 1, 1999 and listed in a separate IDS filed herewith, was published and readily available prior to the filing of the present application.

Applicant notes that Matsuda., like Slaughter, does not teach the execution of a salutation discovery protocol as claimed. As a result, the combination of the teachings of Matsuda and Slaughter, such a combination neither suggested nor deemed appropriate, similarly fails to teach this element of claim 21. In addition, neither Matsuda nor Slaughter, taken alone or in combination, such a combination neither suggested nor deemed appropriate, teach or suggest executing the discovery protocols in the sequence listed. As a result, claim 21 is in condition for allowance.

Claim Rejections under 35 USC §102(e)

The Examiner rejected independent claim 1, 10, and 16 as being anticipated by Elderton et al. (6,477,572). With regards to claim 1, the Examiner asserted that Elderton discloses "executing the invoked network discovery function for examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially (Elderton: col. 6, lines 35-45); and while executing the invoked network discovery function, building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols (Elderton: col. 6, lines 35-45). Claims 10 and 16 are rejected as being substantially similar."

Applicants respectfully disagree with the Examiner's characterization of the teachings of Elderton. At the Examiner's citation of col. 6, lines 35-45, Elderton discloses, "The attribute values are collected by the discovery mechanism and stored in the database 35. For example, in response to request by a system administrator, the discovery mechanism launches the discovery agents, and these agents return a list of IP addresses and hostnames in the managed environment.

For a given node, the discovery agents also identify and return attribute values. Although a discovery mechanism is preferred, other techniques (e.g., request-response protocols) may be used to collect the network configuration data." While Elderton discloses the use of other techniques, such as request-response protocols, there is no teaching that such protocols are executed sequentially. For this reason alone, claim 1 is in condition for allowance. As claims 10 and 16 recite similar elements to those of claim 1, claims 10 and 16 are likewise in condition for allowance.

The Examiner also rejected independent claim 1, 10, and 16 as being anticipated by Graham et al. (6,594,700). With regards to claim 1, the Examiner asserted that Graham discloses "executing the invoked network discovery function for examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially (Graham: col. 2, lines 28-50; col. 6, lines 33-40); and while executing the invoked network discovery function, building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols (Graham: col. 6, lines 19-40). Claims 10 and 16 are rejected as being substantially similar."

Applicants respectfully disagree with the Examiner's characterization of the teachings of Graham et al. Specifically, Graham does not teach "executing the invoked network discovery function for examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially" as recited in claim 1. Graham et al. discloses at col. 2, lines 28-50:

> The USBIM is a coordinated set of components that collaborate to provide interoperability among service discovery protocols. Initially, service provider protocol adapter servlets listen for service advertising requests. Each protocol is associated with a different servlet that understands the details of the service advertising mechanism peculiar to that protocol. The service provider protocol adapter servlets then convert the service provider's protocol into a canonical representation of service advertising. The advertisement is stored in an internal registry. Client protocol adapter servlets listen for client lookup requests and look up a matching service provider. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each particular protocol. The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these

> requirements against the service provider advertisements stored in the same canonical form in the internal registry. Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction.

As is evident, Graham et al. teach a plurality of service provider servlets, each tuned to a particular protocol, that listen for instances of service advertising requests and store the instances in a canonical, or standard, form in an internal registry. In addition, a plurality of client servlets, each tuned to a particular protocol, listen for client lookup requests and convert the requests to the canonical form. Then, the converted client requests for services are matched with canonical representations in the internal registry of the advertised services and client-service provider interaction is brokered. Elsewhere, at col. 6, lines 33-40 there is similarly taught "Specifically, service provider protocol adapter servlets 406, which are componentized mechanisms based on servlets, listen for service advertising requests. Each protocol is associated with a different servlet that understands the details of the service advertising mechanism unique to that protocol. The unique protocol of the service provider is converted to a canonical representation of the service provider advertisement."

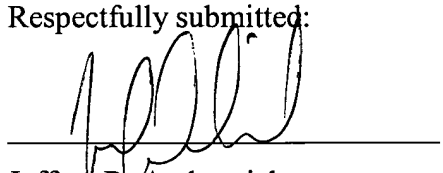
As is evident, Graham et al. teach one or more service provider servlets each listening for advertised services using a particular protocol. It is not taught that the service provider servlets execute network configuration discovery protocols. In fact, it is explicitly stated that the service provider servlets gather information by listening, not executing. Assuming, arguendo, that the service provider servlets did execute some form of a discovery protocol, they would not do so sequentially as the service provider servlets do not coordinate their operations. It is therefore evident that Graham et al. do not teach "executing the invoked network discovery function for examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially" or "building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols" as recited in claim 1. As claims 10 and 16 recite similar elements to those of claim 1, claims 10 and 16 are likewise in condition for allowance.

An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has

any questions or feels that a telephone or personal interview would be helpful in resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

It is submitted that the claims herein patentably define over the art relied on by the Examiner and early allowance of same is courteously solicited.

Respectfully submitted:



27 Apr 06

Jeffrey R. Ambroziak — Date

Reg. No.: 47,387

Customer No.: 29683
HARRINGTON & SMITH, LLP
4 Research Drive
Shelton, CT 06484-6212

Telephone: (203)925-9400
Facsimile: (203)944-0245
email: jambroziak@hspatent.com

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450.

4/27/2006 Elaine F. Mann

Date Name of Person Making Deposit